AMENDED CLAIM SET

The claims have been amended as follows:

1. (previously presented) A liquid fuel quantity measurement system, comprising:

a first container for storing liquid fuel therein;

pressure application means for raising air pressure within said first container by supplying air into said first container;

air-pressure measurement means for measuring the air pressure within said first container;

a first pipeline through which said first container and said pressure application means communicate with each other;

a second container connected with said first container;

a second pipeline through which said first container and said second container communicate with each other;

feed means for feeding the liquid fuel within said first container into said second container through said second pipeline;

detection means for detecting a reduction in the liquid fuel within said second container;

control means for controlling said feed means and said pressure application means by selecting either a pressure mode or a supply mode, based on information from both said air-pressure measurement means and said detection means;

air-volume measurement means for measuring the volume of air supplied into said first container through said first pipeline by said pressure application means; and

arithmetic means for calculating, during said pressure mode, the volume of the liquid fuel within said first container from both the volume of air measured by said air-volume measurement means and a quantity of change in air pressure calculated from the air pressure within said first container measured by said air-pressure measurement means, and for calculating, during said supply mode, the volume of the liquid fuel within said first container from the number of times that the liquid fuel was fed from said first container into said second container.

2. (currently amended) A liquid fuel quantity measurement system, comprising:

a first container defining a space therein for ~~only a single space therein for directly~~ storing liquid fuel, the liquid fuel making direct contact with air within in said first container;

pressure application means for raising air pressure of the air within said first container by supplying air into said first container;

air-pressure measurement means for measuring the air pressure within said first container;

a first pipeline through which said first container and said pressure application means communicate with each other;

air-volume measurement means for measuring the volume of air supplied into said first container through said first pipeline by said pressure application means; and

arithmetic means for calculating the volume of the liquid fuel within said first container from both the volume of air measured by said air-volume measurement means and a quantity of change in air pressure calculated from the air pressure within said first container measured by said air-pressure measurement means.

3. (previously presented) A liquid fuel quantity measurement system, comprising:

a first container for storing liquid fuel therein;

a second container connected with said first container, a pressure inside the first container being maintained higher than a pressure inside the second container;

a second pipeline through which said first container and said second container communicate with each other;

feed means for selectively allowing and prohibiting the liquid fuel within said first container to be fed into said second container through said second pipeline;

detection means for detecting the remaining quantity of the liquid fuel within said second container;

control means for controlling said feed means, based on information from said detection means; and

arithmetic means for calculating the volume of the liquid fuel within said first container from the number of times that the liquid fuel was allowed to be fed by said feed means from said first container into said second container.

4. (previously presented) The liquid fuel quantity measurement system as set forth in claim 1 or 2, wherein said air-volume measurement means comprises raised-pressure measurement means for measuring the raised pressure, and storage means for storing a corresponding relationship between the raised air pressure and the volume of air supplied into said first container.

5. (previously presented) The liquid fuel quantity measurement system as set forth in claim 4, wherein said air-volume measuring means is also used as said raised-pressure measurement means.

6. (previously presented) The liquid fuel quantity measurement system as set forth in claim 1, further comprising:

a first pipeline valve for regulating flow within said first pipeline; and

a second pipeline valve for regulating flow within said second pipeline;

wherein a portion of said first pipeline extending from said first pipeline valve toward said first container and a portion of said second pipeline extending from said second pipeline valve toward said first container are merged into one.

7. (previously presented) The liquid fuel quantity measurement system as set forth in claim 6, provided in a construction machine equipped with a traveling substructure and a

revolving superstructure revolvably mounted on said traveling substructure through a swivel joint,

wherein said first container is provided as a main fuel tank in said traveling substructure, and said second container is provided as an auxiliary fuel tank in said revolving superstructure.

8. (previously presented) A liquid fuel quantity measurement method, comprising:

providing a first container for storing liquid fuel therein;

providing pressure application means for raising air pressure within said first container by supplying air into said first container;

providing a first pipeline through which said first container and said pressure application means communicate with each other;

providing a second container connected with said first container;

providing a second pipeline through which said first container and said second container communicate with each other; and

providing feed means for feeding the liquid fuel within said first container into said second container through said second pipeline,

supplying air into said first container through said first pipeline by said pressure application means when the air pressure within said first container is less than a predetermined pressure;

detecting or calculating both the volume of the supplied air and a quantity of change in the air pressure within said first container due to the air supply;

calculating the volume of the liquid fuel within said first container from both the volume of the supplied air and the quantity of change in the air pressure;

feeding a predetermined quantity of liquid fuel from said first container into said second container through said second pipeline by said feed means when the liquid fuel within said second container is less than a predetermined quantity; and

calculating the volume of the liquid fuel within said first container based on the number of times that the liquid fuel was fed.

9. (currently amended) A liquid fuel quantity measurement method, comprising:

providing a first container defining a space therein for ~~only a single space therein for directly~~ storing liquid fuel, the liquid fuel making direct contact with air within said first container;

providing pressure application means for raising air pressure of the air within said first container by supplying air into said first container;

providing a first pipeline through which said first container and said pressure application means communicate with each other,

supplying air into said first container through said first pipeline by said pressure application means;

detecting or calculating both the volume of the supplied air and a quantity of change in the air pressure within said first container due to the air supply; and

calculating the volume of the liquid fuel within said first container from both the volume of the supplied air and the quantity of change in the air pressure.

10. (previously presented) A liquid fuel quantity measurement method, comprising:

providing a first container for storing liquid fuel therein;

providing a second container connected with said first container;

providing a second pipeline through which said first container and said second container communicate with each other;

maintaining a pressure inside the first container higher than a pressure insider the second container;

providing feed means for selectively allowing and prohibiting the liquid fuel within said first container to be fed into said second container through said second pipeline;

feeding a predetermined quantity of liquid fuel from said first container into said second container through said second pipeline; and

calculating the volume of the liquid fuel within said first container based on the number of times that the liquid fuel was fed.